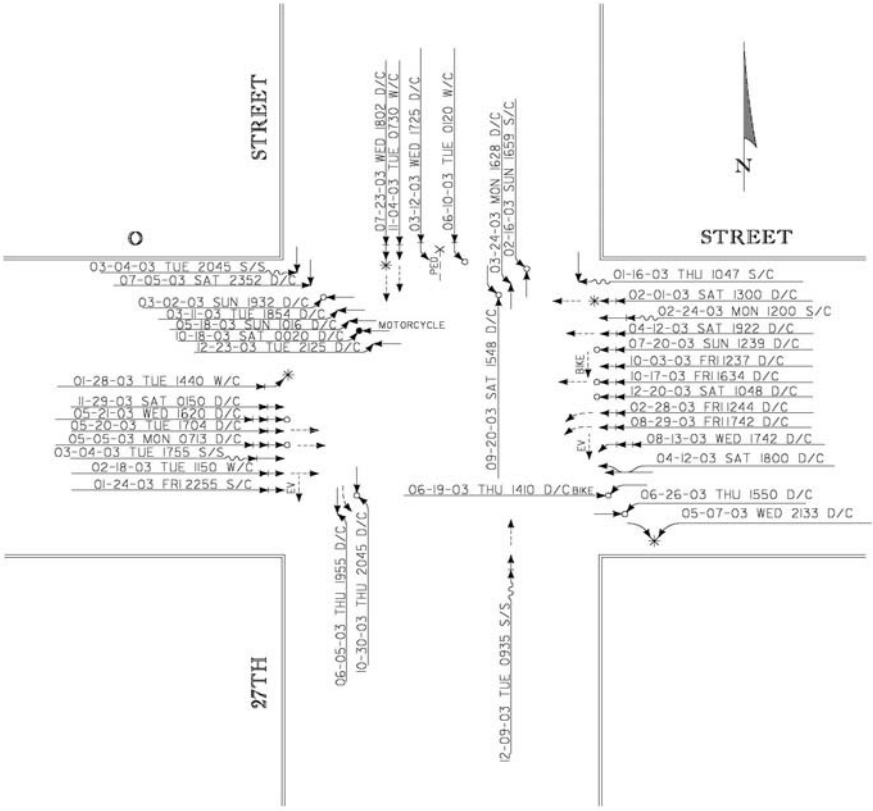
5.1 27th Street and O Street

BEFORE

ADT: 66,200 veh/day (2002) **Time Period:** 2003

Traffic Control: Actuated Coordinated Signal **Crash Pattern:** EB Left Turns



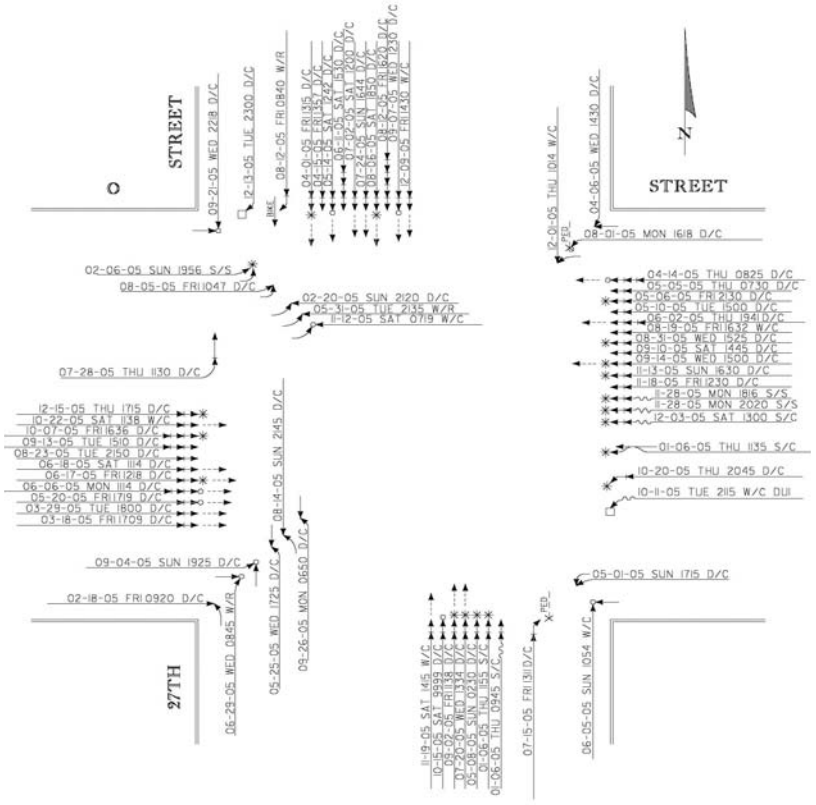
Total Crashes in Before Period: 40

27th Street & O Street - Westbound Approach (Before)

5.1 27th Street and O Street

AFTER

Countermeasures:	Constructed EB & WB Dual Left Turn Lanes, Rebuilt Traffic Signal, Removed Eastbound Right Turn Lane	**Time Period:**	2005
Improvement Completion Date:	Summer 2004	**Speed Limits:**	NS Arterial- 35 mph EW Arterial- 35 mph



Total Crashes in After Period: 66

27th Street & O Street - Westbound Approach (After)

5.1 27th Street and O Street

COMPARISON

Countermeasures: Constructed EB & WB Dual Left Turn Lanes, Rebuilt Traffic Signal, Removed Eastbound Right Turn Lane

Improvement Completion Date: Summer 2004

	Before	After	Change
Analysis Period	2003	2005	-
Primary Crash Benefit			
Total Number of Correctable Crashes	26	32	23%
All Other Intersection Crashes	14	34	143%
Intersection Crash Experience			
Injury + Fatal Crashes	13	12	-8%
Property Damage-Only Crashes	23	35	52%
Non-Reportable Crashes	4	19	375%
Total Number of Intersection Crashes	*40*	*66*	65%
Total Intersection Benefit			
Crash Rate	1.66	2.73	64%
EPDO Rate	6.06	6.62	9%
EPDO Number*	146.48	159.99	13.51

Cost of Property Damage Crash:	$	8,200
Total Benefit (12 months):	$	(110,782)
Equivalent Uniform Annual Benefit (EUAB):	$	(142,206)

Total Cost of Improvements:

Equivalent Uniform Annual Cost (EUAC):	$	38,875
Initial Cost:	$	445,895

Benefit-Cost Ratio: $\frac{\$ \ (142,206)}{\$ \ 38,875} = -3.7$

Net Benefit (Present Worth): $ (142,206) - $38,875 = ($181,081)

**Change NOT Statistically Significant at 95% Confidence Interval*

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